A List of the Reptiles of Borneo.

By R. Shelford, B.A. (Cantab.) Curator, Sarawak Museum.

The following purports to be nothing more than a mere list of the reptiles recorded as occurring in Borneo to date December, 1900. Doubtless a few species still await discovery. seeing that so recently as March 1899, Dr. R. Hanitsch found on that well-explored mountain, Kina Balu, a new gecko and two new snakes, and that the collections made by Mr. E. A. W. Cox and myself on Mount Penrissen in the same month contained also a new lizard* (Lygosoma Shelfordi Blgr.): nevertheless the herpetological fauna of the island may fairly be described as being well-known, thanks largely to the admirable collections formed in past years by the late Mr. A. H. Everett, the late Mr. John Whitehead and by Dr. C. Hose, and the time appears ripe, even if the need is not very pressing (though I have seen no list pretending to such completeness as this since the publication of Mocquard's Recherches sur la faune herpetologique des isles de Borneo et de Palawan in the Nouvelles Archives du Muséum 1890) for the production of such a list as this.

I have not included the reptiles occurring in those zoogeograpical dependencies of Borneo, the islands of the Natuna and Palawan groups, as lists of these may be found in the *Novitates Zoologica* and Annals and Magazine of Natural History.

References to the literature treating of the various species have been reduced as far as possible. I have given as a rule merely a reference to the British Museum Catalogues or to the earliest published description of the species.

In those cases where I have found that the colours of living or newly dead specimens differ markedly from the published descriptions, compiled apparently from faded spirit speci-

^{*} The new snakes described by Mr. Boulenger in the same paper together with this lizard had been stored in the Sarawak Museum for several years, unidentified. One,—Amblycephalus nuchalis—was rediscovered a few weeks ago.

mens, I have written short notes correcting the errors. No

attempt at field notes has been made.

In a list of such local interest as this, it is necessary that more detailed localities be quoted than merely Borneo or Sarawak—though these are quoted when no other can be given—and some attention has been paid to this point; on the other hand I have not considered it worth while to give a long list of the localities in which such common species as Geomyda spinosa, Gecko monarchus, Coluber melanurus, etc., etc., may be obtained, but have contented myself with remarking that the species is widely distributed throughout the island. For the benefit of those unfamiliar with the geography of Borneo, the following details of the position of the localities quoted below may be useful:—

Sarawak River, Samarahan R., Sadong R., Batang Lupar R., Saribas R., Baram R., Limbang R., Trusan R., are main rivers of Sarawak taken in order as one proceeds N. E. Kuching (the capital of Sarawak), Paku, Bau, Busau, Braang, Pankalan Ampat are on the Sarawak river or its tributaries, the two latter are near the foot of Mt. Penrissen. Matang is a mountain 7 miles distant from Kuching: Santubong is a mountain at the mouth of the Sarawak river, a village of the same name lying at its foot. Buntal is near the mouth of the same river. Simanggang is on the Batang Lupar R. Sibu, Kapit and Belaga are government stations on the Rejang River. Oya is on the sea-coast between the Rejang and Baram. Niah is at the mouth of the Baram; Dulit, Batu Song and the Pamabo range, mountains in its head-waters. The Padas river is in the territory of British N. Borneo, it debouches on the N. coast. Mt. Kina Balu, Bandjermassin, Koti, Labuan and Sandakan may be found on any map of Borneo. Telang, Sinkawang, Barabei and Tanjong are in S. W. Borneo (Dutch), Sintang is near Pontia-Sebroeang is an affluent of the Kapuas, N E. of Sintang. Of the 87 genera enumerated here, 6 are peculiar to Borneo,

viz.—

Chelonians, Brookeia.
Lizards, Lanthanotus.
Snakes, Hydrablabes,
Lepturophis,
Oreocalamus,
Idiopholis.

Of the 212 species, the following, 64 in number, are peculiar to the island.

Chelonians. Bellia borneensis. Brookeia baileyi.

Lizards. Gymnodactylus baluensis. Aeluroscalabotes dorsalis. Gecko rhacophorus. Draco cornutus. D. obscurus. D. cristatellus. D. maximus. D. microlepis. Gonyocephalus doriæ. G. liogaster. G. miotympanum. Japalura nigrilabris. Lanthanotus borneensis. Varanus heteropholis. Lygosoma tenuiculum. L. shelfordi. (?) L. vittatum. L. nitens. L. parietale. L. whiteheadi. L. alfredi. Tropidophorus beccarii. T. brookii.

Snakes. Stoliczkaia borneensis. Tropidonotus conspicillatus.
T. petersii. T. sarawacensis. T. flavifrons. Opisthotropis typica. Hydrables periops. H. præfrontalis. Xylophis albonuchalis. Lepturophis borneensis. Xenelaphis ellipsifer. Simotes subcarinatus. Simotes annulifer. Oreocalamus hanitschi. Idiopholis collaris. Calamaria baluensis. C. grabowskii. C. prakkii. C. bicolor. C. lateralis. C. brookii. C. brachyura. C. hosei. C. beccarii. C. rebentischii. C. schlegelii. C. borneensis. C. benjaminsii. C. melanota. C. lovii. C. gracillima. C. picteti. Hypsirhina alternans. H. doriæ. Dipsadomorphus nigriceps. Hydrophis brookii. Distira sarawacensis. Amblycephalus nuchalis. Lachesis borneensis.

The initials S. M. signify that the species is represented in the Sarawak Museum collection.

Reptilia.

ORDER EMYDOSAURIA.

Fam. Crocodilida.

Genus Tomistoma.

Tomistoma schlegelii (S. Müll.): Blgr. Cat. Chel. B. M. p. 276. Sadong R., Sarawak, Muka, N. Borneo. S. M.

Genus Crocodilus.

Crocodilus porosus (Schneid.): Blgr. l.c. p. 284.
Occurs in every river in Borneo.

S. M.

ORDER CHELONIA.

Suborder Thecophora, Super. Fam. A. Trionychoidea.
Fam. Trionychidæ.
Genus Trionyx.

Trionyx subplanus (Geoffr.): Blgr. Cat. Chel. B. M. p. 246. Kuching.

Trionyx hurum (Gray): Blgr. l.c. p. 249. Santubong.

S. M.

Trionyx cartilagineus (Bodd.): Blgr. l.c. p. 253. Kuching, Bau, Limbang, Baram (Hose), Sebrœang (Chaper). S. M.

Genus Pelochelys.

Pelochelys cantoris (Gray): Blgr. l.c. p. 263. Koti (Carl Bock).

Super. Fam. B. Cryptodira, Fam. Testudinidae.

Genus Testudo.

Testudo emys (Schleg. & Müll.): Blgr. l.c. p. 158. Simanggang (H.H. the Rajah). Batang Lupar. S. M.

Genus Geomyda.

Geomyda spinosa (Gray): Blgr. l.c. p. 137.

An extremely common and widespread species.

S. M.

Genus Nicoria.

Nicoria spengleri (Gmel.): Blgr. l.c. p. 120. Borneo.

Genus Cyclemys.

Cyclemys platynota (Gray): Blgr. l.c. p. 130. Kuching. Limbang (Bartlett). S. M.

Cyclemys dhor (Gray): Blgr. l.c. p. 131.
Widely distributed and very common.
S. M.

Cyclemys amboinensis (Daud): Blgr. l.c. p. 133. Kuching.

S. M.

Genus Bellia.

Bellia crassicollis (Gray): Blgr. l.c. p. 98. Borneo (Dillwyn).

Bellia borneensis (Gray): Blgr. l.c. p. 100. Sintang (Bleeker).

Genus Callagur.

Callagur picta (Gray): Blgr. l.c. p. 60. Kuching. Buntal. Oya. Baram (Hose).

S. M.

Genus Kachuga.

Kachuga trivittata (D. & B.): Blgr. l.c. p. 55. Kuching.

Genus Brookeia.

Brookeia baileyi (Bartlett).

S. M.

The literature relating to this species is as follows:-

Hardella baileyi, Bartlett. Sarawak Gaz. vol. XXV, p. 83, (1895).

Hardella baileyi, Bartlett. Zoolog. Note Book of Sarawak No. 1, p. 60. (1895.)

Brookeia baileyi, Bartlett. Sarawak Gaz. vol. XXVII, p. 113, (1895).

Brookeia baileyi, Bartlett. Zoolog. Note Book of Sarawak No. 2, p. 81. (1896).

Liemys inornata, Blgr. Ann. Mag. N.H.(6) vol. 19, p. 468-469.

Lobok Antu district, Batang Lupar river (D. J. S. Bailey, Esq.) Type in Sarawak Museum.

Family Chelonida.

Genus Chelone.

Chelone mydas (L): Blgr. Cat. Chel. B.M. l.c. p. 180. Bornean seas.

S. M.

Chelone imbricata (L): Blgr. l.c. p. 183. Bornean seas.

S. M.

Genus Thalassochelys.

Thalassochelys caretta (Linn.): Blgr. l.c. p. 184. Borneo (Bleeker).

Suborder Athecae. Fam. Sphargidae.

Genus Dermochelys.

Dermochelys coriacea (Linn.): Blgr. l.c. p. 10.

This species probably occurs in these waters though I have seen no record of its capture.

ORDER SQUAMATA.
Suborder LACERTILIA.
Family Geckonidæ.
Genus Gymnodactylus.

- Gymnodactylus marmoratus (Kuhl.): Blgr. Cat. Lizards B. M. I, p. 44.
- Mt. Kina Balu (Hanitsch). Mt. Dulit (Hose). Mt. Penrissen (Shelford). Kuching (Shelford). Mt. Matang. Sebroeang valley (Chaper). S. M.
- Gymnodactylus consobrinus (Peters): Blgr. l.c. p. 47.

 Matang. Mt. Santubong. Kuching (Shelford). Belaga (Hon. C. A. Bampfylde). S. M.
- Gymnodactylus baluensis (Mocq.): Mocquard. Nouvelles Archives du Muséum. (3). II, p. 125. Pl. vii, fig. 1, a.b.c. Kina Balu (Whitehead).

Genus Gonatodes.

Gonatodes kendalli (Gray): Blgr. Cat. Liz. B. M. I. p. 63, Pl. v, f. 4.

Matang. Santubong. Kuching. Simatan (Shelford, Bartlett).

Gonatodes affinis (Stol.): Stol. Journ. As. Soc. Beng. xxxix. 1870, p. 167, Pl. x, f. 1.

Gonatodes penangensis. S. Flower. P. Z. S. 1896, p. 863,

Pl. xliv. f. 1.

Mt. Penrissen 3000' (Shelford and Cox). The species is now recorded for the first time from Borneo. S. M.

Colours of Bornean examples. Coal black with minute yellow spots on the back, tip of tail yellow. This is very different from the colouration of Malay Peninsula specimens.

Genus Aeluroscalabotes.

Aeluroscalabotes felinus (Günth.): Blgr. Cat. Liz., B. M. I. p. 73. Pl. iii, f. 8.

Pankalan ampat (Haviland). Penrissen (Shelford). Kuching, Saribas. S. M.

Aeluroscalabotes dorsalis (Peters): Blgr. l.c. p. 74. Sarawak. (Doria and Beccari).

Genus Hemidactylus.

Hemidactylus frenatus (Schleg.): Blgr. l.c. p. 120. Widely distributed throughout the island.

S. M.

Hemidactylus platyurus (Schneid.): Blgr. l.c. p. 143. N. Borneo (Whitehead, Hanitsch). Kuching (Bartlett). S. M.

Hemidactylus brookii (Gray): Blgr. l.c. p. 128. Very doubtfully included in the Bornean fauna.

Genus Mimetozoon.

Mimetozoon craspedotus (Mocq.): Mocquard Le Natur 1890. p. 144.

Mimetozoon floweri Blgr. P. Z. S. 1896, p. 767, Pl. xxxvi. N Borneo (Whitehead). Kuching (Shelford). S. M.

Genus Gehyra.

Gehyra mutilata (Wiegm.): Blgr. Cat. Liz. B. M. I. p. 148. Widely distributed.

Genus Lepidodactylus.

Lepidodactylns ceylonensis. (Blgr): Blgr. l.c. p. 164, Pl. xiii, f. 3.

Lepidodactylns aurantiacus. (Bedd.): Blgr. l.c. p. 164, Pl. xiii, f. 3.

The Sarawak Museum has a young specimen from Santubong which I rather doubtfully refer to this species. S. M.

Lepidodaetylns lugubris (D. & B.): Blgr. l.c. p. 165. Bintang (Bleeker).

Genus Gecko.

Gecko stentor (Cantor): Blgr. l.c. p. 184. Widely distributed throughout the island.

S. M.

Gecko monarchus (Schleg.): Blgr. l.c. p. 187. Widely distrbuted.

S. M.

Gecko verticillatns (Laur.): Blgr. l.c. p. 183. Rejang (Hon. C. A. Bampfylde).

S. M.

Gecko rhecophorns (Blgr.): Blgr. Ann. Mag. N. H. (7) Vol. iv (1899) p. 451. Hanitsch: Journ. As. Soc. Straits Br. No. 34, 1900, p. 70

Pl. i, fig. i.

Kina Balu (Hanitsch). Type in Raffles Museum, Singapore.

Genus Ptychozoon.

Ptychozoon homalocepholum (Crev.): Blgr. Cat. Liz. B. M. I. p. 190.
Brang (Haviland). Pamabo range (Hose). Pankalan ampat (Shelford and Cox). Kuching. S. M.

Ptychzoon horsfieldii (Gray). Gray. Phil. Mag. (2) iii, p. 54. F. Müller (Veth. Nat. Ges. Basel, 1892, p. 210).

Genus Tarentola.

Tarentola delalandii (D. & B.): Blgr. Cat. Liz. B. M. I. p. 199. Very doubtfully included in the Bornean fauna.

Fam. Agamidæ. Genus Draco.

- Draco volans (L.): Blgr. l.c. p. 256.
 Almost universally distributed throughout Borneo. S. M.
- Draco cornutus (Günth.): Blgr. l.c. p. 258, Pl. xx, f. 4.

 Kiou, N. Borneo (Hanitsch). Kina Balu (Whitehead).

 Pamabo range (Hose). Matang, Santubong Kuching
 S. M.
- Colories, above dark green, mottled with paler green, outer half of wing membrane crimson; belly blue; basal two-thirds of gular appendage of male salmon pink.
- Druco rostratus (Günth.): Blgr. l.c. p. 261. Doubtfully included in the Bornean fauna.
- Draco funbriatus (Kuhl.): Blgr. l.c. p. 265. Matang (Bartlett). Pamabo range (Hose). S. M.
- Draco obscurus (Blgr.): Blgr. A. M. N. H. (5) 1887, Vol. xx, p. 95.
- Draco cristatellus (Gunth.): Blgr. Cat. Liz. B. M. I. p. 266. Banting. Kuching (Bartlett). S. M.
- Draco hæmatopogon (Gray): Blgr. l.c. p. 267. N. Borneo (Whitehead). Sarawak. S. M.
- Druco teniopterus (Gunth.): Blgr. l.c. p. 269.
 Matang. S. M.
- Draco quinquefusciatus (Gray): Blgr. l.c. p. 269, Pl. xx, f. 8.
 As widely distributed as D. volans.
 S. M.
- Draco melanopogon (Blgr.): Blgr. Cat. Liz. B. M. iii, p. 492.

 Another extremely common species.

 S. M.
- Draco maximus (Blgr.): Blgr. P. Z. S. 1893, Pl. xxii, f. 1. Mt. Dulit (Hose). Mts. Matang and Penrissen (Shelford). S. M.
- Draco microlepis (Blgr.): Blgr. P. Z. S. 1893, Pl. xcii, f. 2. Merabah, N. Borneo (Everett).

Genus Aphaniotis.

Aphaniotis fusca (Peters): Blgr. Cat. Liz. B. M. I. p. 274.
Santubong (Shelford).
S. M.

Genus Gonyocephalus.

- Gonyocephalus doriw (Peters): Blgr. l.c. p. 284.
 Mt. Buri, Sadong River.
 S. M.
- Gonyocepalus liogaster (Günth.): Blgr. l.c. p. 286.

 Kuching, Santubong, Samarahan.

 S. M.
- Gonyocephalus miotympanum (Günth.): l.c. p. 287. N. Borneo (Whitehead). Labuan (Dillwyn).
- Gonyoephalus borneensis (Schleg.): Blgr. l.c. p. 288. N. Borneo (Whitehead).
- Gonyocephalus grandis (Gray): Blgr. l.c. p. 298.
 Mt. Dulit (Hose). Pankalan ampat (Haviland). Simanggang. Kuching.
 S. M.
- Gonyocephalus tuberculatus (Günth.): Blgr. l.c. p. 291. Santubong. (Shelford). S. M.

Genus Japalura.

Japalura nigrilabris (Peters): Blgr. l.c. p. 311. Kina Balu (Whitehead and R. Hanitsch). Penrissen, Matang, Santubong, Kuching (Shelford). S. M.

Genus Calotes.

Calotes cristatellus (Kuhl.): Blgr. l.c. p. 316.
Universally distributed throughout the low-country. S. M.

Fam. Helodermatidae.

Genus Lanthanotus.

Lanthanotus borneensis (Steind.): Blgr. Cat. Liz. B. M. II, p. 302.
Blgr. P. Z. S. 1899, p. 596.
One example is in the Sarawak Museum from the Plagus
Rapids, Rejang River, collected by the Hon'ble C. A.
Bampfylde. The type and only other known specimen
is in the Vienna Museum.
S. M

Fam. Varanidæ. Genus Varanus.

Varanus heteropholis (Blgr.): Blgr. P. Z. S. 1892, p. 506, Pl. xxix. Mt. Dulit (Hose). S. M.

Varanus dumerilii (Müller): Blgr. Cat. Liz. B. M. II. p. 312.

Baram (Hose). Pankalan ampat (Haviland). Kuching,
Buntal. S. M.

Varanus rudicollis (Gray): Blgr. l.c. p. 313.
Baram (Hose). Pankalan ampat (Haviland). Matang, Kuching.
S. M.

Varanus salvator (Laur.): Blgr. l.c. p. 314.

Dulit (Hose). Sebroeang (Chaper). Rejang R. (Hon. C. A. Bampfylde). Kuching, Santubong (Lewis). S. M.

Fam. Lacertida. Genus. Tachydromus.

Tachydromus sexlineatus (Daud.): Blgr. Cat. Liz. B. M. III, p. 4. Universally distributed throughout the low-country. S. M.

Fam. Scincidæ. Genus Mabuia.

Mabuia rugifera (Stol.): Blgr. l.c. p. 184.

All these three species of Mabuia are abundant in every part of the island.

S. M.

Mabuia multifasciata (Kuhl.): Blgr. l.c. p. 186. S. M.

Mabnia rudis (Blgr.): Blgr. l.c. p. 188.

Genus *Lygosoma*. Sub.-Genus *Hinulia*.

Lygosoma tenuiculum (Mocq.) Nouv. Arch. Mus. (3) II, p. 133, Pl. viii, f. 2, Kina Balu (Whitehead).

Lygosoma variegatum (Peters): Blgr. Cat. Liz. III, p. 246. Common everywhere. A variable species. S. M.

Lygosoma shelfordi (Blgr.): Blgr. P. Z. S. 1900, p. 182, Pl. xiv, f. 1. S. M.

Mt. Penrissen (Shelford). Type in Sarawak Museum.

Sub.-Genus Keneuxia.

Lygosoma olivaceum (Gray): Blgr. Cat. Liz. B. M. iii, p. 251. S. M. Kina Balu (Whitehead). Kuching (Bartlett).

Lygosoma vittatum (Edel): Blgr. l.c. p. 252.
Common in all localities.

S. M.

Sub.-Genus Liolepisma.

Lygosoma nitens (Peters): Blgr. l.c. p. 262. Kuching. S. M.

Sub.-Genus Emoa.

Lygosoma parietale (Peters): Blgr. l.c. p. 299. S. M. Common in many localities but chiefly near the coast.

Sub.-Genus Riopa.

Lygosoma bowringii (Günth.): Blgr. l.c. p. 308. S. M. Kuching.

Lygosoma whiteheadi (Mocq.): Nouv. Arch. Mus. (3) ii, 'p. 134, Pl. viii, f. 3. (1890).

Kina Balu (J. Whitehead).

Lygosoma bampfyldei (Bartlett): Bartlett Journ. As. Soc. Straits Br. No. 26, p. 96.

Rejang River, (Hon. C. A. Bampfylde). Types in British Museum and in Sarawak Museum. The species has also been recorded from the Larut Hills, Perak.

The only published description is so inadequate that I

append a more detailed diagnosis.

Body elongate, limbs very short: the distance between the end of the snout and the fore-limb is contained twice in the distance between the axilla and groin. Snout obtuse. Lower eyelid scaly. Supranasals present, in contact behind the rostral. Frontonasal much broader than long forming a crescentic suture

S. M.

with the frontal; præfrontals small; frontal in contact with the first and second supraoculars; four supraoculars; six supraciliaries; frontoparietals distinct: interparietal smaller; parietals forming a suture behind the interparietal; a pair of temporals border the parietals; nuchals not distinguishable. Seven upper labials; the first and second the largest; the fourth to sixth border the eye; ear opening small, round; three auricular lobules. Thirty-eight scales round the body. Dorsals smooth. Marginal preanals a little enlarged. The hind limb is contained two and a half times in the distance between the axilla and groin. Digits short, compressed; fourth toe a little longer than the third; 14 subdigital lamellæ beneath the fourth toe. Tail very thick, contained five times in the total length. Yellowish brown with a white band across the nape. Measurements in millimetres:—

Total length 163, Head 20, Width of head 15.5, Body 109, Fore limb 20, Hind limb 29, Tail 32.

Lygosoma alfredi (Blgr).

Unfortunately I can give no reference to the literature relating to the species, nor any exact locality. Mr. A. H. Everett was the collector.

Genus Tropidophorus.

Tropidophorus beccarii (Peters): Blgr. Cat. Liz. B. M. p. 360. Kina Balu (Whitehead). Matang (Beccari).

Tropidophorus brookii (Gray): Blgr. l.c. p. 361.

Dulit (Hose). Santubong (Bartlett). Pankalın ampat. Kuching (Shelford). Matang. S. M.

Suborder Ophidia.

Fam. Typhlopida.

Genus Typhlops.

Typhlops lineatus (Boie): Blgr. Cat. Snakes. B, M. I. p. 15. Kuching. S. M.

Typhlops braminus (Daud): Blgr. l.c. p. 16.
Kuching.

Typhlops olivaceus (Gray): Blgr. l.c. p. 50. Baram (Hose).

S. M.

Fam. Boidæ. Genus Python.

Python reticulatus (Schneid.): Blgr. l.c. p. 85. Widely distributed.

S.M.

Python curtus (Schleg.): Blgr. l.c. p. 89.

Kuching: Sibu (H. H. the Raja Muda). Telang S. E. Borneo (Grabowsky).

S. M.

Fam. Ilysiidæ. Genus Cylindrophis.

Cylindrophis rufus (Laur.) Blgr l.c. p.135. A very common species.

S. M.

Cylindrophis lineatus (Blanf.) Blgr. l.c. p. 137

Matang (Peake). Pankalan ampat (Shelford and Cox).

Previously unrecorded from Borneo. The type is in the Singapore Museum.

S. M.

Colors of living specimen. Above.—Black with irridescent sheen, head and tail red, and two longitudinal bands on each side of the middle line red. Beneath.—White blotched heavily with black, constituting from 30 to 35 irregular transverse bands: the under surface of the tail is immaculate white.

Fam. Xenopeltidæ. Genus Xenopeltis.

Xenopeltis unicolor (Reinw.): Blgr. l.c. p. 168. Kuching.

S.M.

Fam. Colubridæ.
Series A. Aglypha.
Sub. Fam. i. Acrochordinæ.
Genus Acrochordus.

Acrochordus javanicus (Hornst.): Blgr. l.c. p. 173.
Sadong River (Bartlett).

S. M.

Genus Chersydrus.

Chersydrus granulatus. (Schnied.): Blgr. l.c.p. 174. Buntal (Haviland).

S. M.

Genus Stoliczkaia.

Stoliczkaia borneensis (Blgr.): Blgr. A. M. N. H. (7) Vol. iv. p. 42. (1899). Kina Balu (Hanitsch). Hanitsch. Journ. As. Soc. Str. Br. No. 34 (1900) Pl. j. f. 2.

Genus Xenodermus.

Xenodermus javanicus (Reinh.): Blgr. Cat, Snakes. B. M. I. p. 175. Kuching (Shelford). Previously unrecorded from Borneo. S. M.

Sub. Fam. ii. Colubrinae. Genus Polyodontophis.

Polyodontophis geminatus (Boie): Blgr. Cat. Snakes B. M. I. p. 185. Kuching (Haviland and Bartlett). S. M.

Genus Tropidonotus.

Tropidonotus conspicillatus (Günth.): Blgr. l.c. p. 222.
Dulit (Hose). Tampassuk N. Borneo (Hanitsch). Kuching.
Simanggang (H. H. the Raja Muda). Matang. S. M

Tropidonotus trianguligerus (Boie): Blgr. l.c. p. 224. Oya. Kuching. Rejang River (Hon. C. A. Bampfylde). Telang and Lihong. Bahaja, S. E. Borneo (Grabowsky.) S. M.

Tropidonotus petersii (Blgr.): Blgr. l.c. p. 225.

Kuching. Saribas.

S. M.

Tropidonotus piscator (Schneid.): Blgr. l.c. p. 230. Borneo.

Tropidonotus stolatus (L.): Blgr. l.c. p. 253.

Doubtfully included in the Bornean fauna.

Tropidonotus chrysargus (Schleg.): Blgr. l.c. p. 258.

Dulit (Hose). Kuching (Bartlett). Rejang River (Brooke Low).

Tropidonotus muculatus (Edel): Blgr. l.c. p. 260.
Dulit (Hose). Kina Balu (Whitehead). Kuching. Limbang (Bartlett).
S. M.

Tropidonotus saravacensis (Günth.): Blgr. l.c. p. 261.

Dulit (Hose). Kina Balu (Whitehead and Hanitsch). Matang. Kuching.

S. M.

Tropidonotus flavifrons (Blgr): Blgr. l.c. p. 263. Kina Balu (Whitehead and Hanitsch). Valley of Sebroeang (Chaper). S. M.

Genus Macropisthodon.

Macropisthodon flaviceps (D. and B.): Blgr. l.c. p. 266.
Valley of Sebroeang (Chaper). Kuching.
Skin of nape bright red. A black vertebral stripe edged anteriorly with white streaks.
S. M.

Genus Opisthotropis.

Opisthotropis typica (Mocq.): Blgr. l.c. p. 285. Kina Balu (Whitehead).

Genus Hydrablabes.

Hydrables periops (Günth.): Blgr. l.c. p. 296. Matang.

Hydrables præfrontalis (Mocq.): Blgr. l.c. p. 297. Kina Balu (Whitehead).

Genus Xylophis.

Xylophis albonuchalis (Günth.): Günth. A. M. N. H. (6) vol. 17, p. 229. (1896).

Baram (Hose).

Genus Lycodon.

Lycodon effrenis (Cantor): Blgr. Cat. Snakes. B. M. I. p. 356. Sinkawang (Bleeker).

A	LIST	OF	THE	REPTILI	ES OF	BORNEO.
---	------	----	-----	---------	-------	---------

59

Lycodon subcinctus (Boie): Blgr. l. c. p. 359.	S 35
Kuching (Bishop Hose).	S. M.
Lycodon albofuscus (D. and B.): Blgr. l.c. p. 357. Kina Balu (Whitehead). Kuching.	S. M.
Genus Lepturophis.	
Lepturophis borueensis (Blgr.): Blgr. P. Z. S. 1900, p. 183, Kuching. Type in the Sarawak Museum.	Pl xv. S. M.
Genus Dryocalamus.	
Dryocalamus tristrigatus (Günth.): Blgr. Cat. Snakes Bp. 372.	. м. і.
Kuching.	S. M.
Genus Zaocys.	
Zaocys carinatus (Günth.): Blgr. l.c. p. 377. Valley of Sebroeang (Chaper). Kuching.	s. M.
Zaocys fuscus (Günth.): Blgr. l.c. p. 378. Kuching. Sibu (H. H. the Raja Muda).	S. M

Genus Xenelaphis.

Xenelaphis hexagonotus (Cantor.): Blgr. Cat. Snakes. B. M. ii, p. 8.
Valley of Sebroeang (Chaper). Kuching, Rejang R. (Brooke-Low). Baram (Hose). S. M.

Xenelaphis ellipsifer (Blgr.): Blgr. P. Z. S. 1900, p. 184, Pl xvi. Type in the Sarawak Museum. Pankalan ampat. Caught in a Dyak fish-trap. S. M.

Genus Coluber.

Coluber twniurus (Cope): Blgr. Cat. Snakes II. l.c. p. 47.
Braang, Sarawak River (Haviland). S. E. Borneo (Grabowsky.)
S. M.

Colüber oxycephalus (Boie): Blgr. l.c. p. 56.
Kuching, Rejang River (Brooke-Low). [Baram (Hose).
A specimen obtained near the mouth of the Trusan river amongst sandy scrub was bright ochreous in colour. S. M.

Coluber melanurus (Schleg.): Blgr. l.c. p. 60. Widely distributed throughout Borneo.

S. M.

Genus Gonyophis.

Gonyophis margaritatus (Peters): Blgr. l.c. p. 71.
Dulit (Hose . Kuching (Bartlett).

Colours of living specimen. Bright green, scales black, bordered throughout three-quarters of the total length, tail pale blue, seventeen yellow bands on the body: ventral shields yellow with black borders.

S. M.

Genus Dendrophis.

Dendrophis pictus (Gmel.): Blgr. l.c. p. 78. Very widely distributed.

S. M.

Dendrophis formosus (Boie): Blgr. l.c. p. 84. N. Borneo (Whitehead). Kuching.

S. M.

Genus Dendrelaphis.

Dendrelaphis caudolineatus (Gray): Blgr. l.c. p. 89.
A very common species near Kuching.

S. M.

Genus Simotes.

Simotes purpurascens (Schleg.): Blgr. l.c. p. 218.

Kuching. Saribas. Pankalan ampat (Haviland). Matang.
Labuan (Dillwyn). S. M.

Simotes octolineatus (Schneid.): Blgr. l.c. p. 224.

A widely distributed species.

S. M.

Simotes subcarinatus (Günth.): Blgr. l.c. p. 226.

Kuching. Matang (Shelford).

Colours of living examples dark olive above, head suffused with crimson, body with pinkish cross bands edged with black. Ventral surface crimson.

Simotes annulifer (Blgr.): Blgr. l.c. p. 226. N. Borneo (Everett).

Genus Oligodon.

Oligodon everetti (Blgr.): Blgr. l.c. p. 239. Kina Balu (Everett).

Oligodon vertebralis (Günth.): Blgr. l.c. p. 245. Kina Balu (Whitehead). Banjermassin (Dillwyn).

Genus Ablabes.

Ablabes tricolor (Schleg.): Blgr. l.c. p. 281. Matang.

S. M.

Ablabes baliodirus (Boie): Blgr. l. c. p. 283. Kina Balu (Whitehead). Pankalan ampat (Haviland). Kuching, Saribas, Baram (Hose). S. M.

Ablabes longicanda (Peters): Blgr. l.c. p. 284. Batu Song (Hose). Rejang River (Brooke-Low). Busau. Baram (Hose). Matang. S. M.

Genus Oveocalamus.

Oreocalamus hanitschi (Blgr.): Blgr. A. M. N. H. (7) Vol. iv. (1899) p. 453.

Hanitsch, Journ. As. Soc. Str. Br. No. 34 (1900) p. Pl. Kina Balu (Hanitsch). Type in Raffles Museum. Singapore.

Genus Idiopholis.

Idiopholis collavis (Mocq.) Blgr. Cat. Snakes B. M. II. p. 327. Valley of Sebroeang (Chaper).

Genus Pseudorhabdium.

Pseudorhabdium longiceps (Cantor): Blgr. l.c. p. 329. Pontianak (Peters), Kuching. Simanggang.

Colours of fresh specimen black, brilliantly irridescent, a narrow sealing-wax red collar and an oblique streak passing behind the eye from the last upper labial to the parietal, also red.

S. M.

Genus Calamaria.

Calamaria vermiformis (D. & B.): Blgr. l.c. p. 333. Kina Balu (Whitehead). Kuching, Batu Song (Hose). Matang.

- Calamaria balnensis (Blgr.): Blgr. l.c. p. 335. Kina Balu (Whitehead).
- Calamaria grabowskii (Fisch.): Blgr. l.c. p. 335. Kina Balu (Whitehead). S. E. Borneo (Grabowsky).
- Calamaria prakii (v. Lidth de Jeude): Blgr. l.c. p. 337. N. Borneo.
- Calamaria everetti (Blgr.): Blgr. l.c. p. 340. Sarawak (Everett). Pankalan ampat (Haviland). S. M.
- Calamaria lencogaster (Bleek): Blgr. l.c. p. 341.

 Kuching (Bartlett). Matang (Sands). Labuan (Everett).

 Kina Balu (Everett).

 S. M.

 Colours of fresh specimens. Above, irridescent brown with 8 longitudinal black stripes, broad transverse black band on nape; tail, red with 3 longitudinal black stripes and two transverse bars. Beneath bright red, except the chin and throat which are white, a black stripe on the sub-caudals may or may not be present.
- Calamaria bicolor (D. & B.): Blgr. l.c. p. 342. Kina Balu (Whitehead). Paku, Upper Sarawak. S. M.
- Calamaria lateralis (Mocq.): l.c. p. 342. Kina Balu (Whitehead).
- Chamaria brookii (Blgr.): Blgr. Cat. Snakes B. M. III, p. 647.
 Matang (H. H. the Rajah).
 S. M.
- Calamaria brachynra (Blgr.): Blgr. l.c. p. 647. Kina Balu (Everett).
- Calamaria hosei (Günth.): Günth. A. M. N. H. (6) Vol. 17, p. 229. (1896). Entòyut river (Hose), Baram district.
- Calamaria beccarii (Peters): Blgr. Cat. Snakes B.M. II p. 343. Sarawak (Doria and Beccari).
- Calamaria rebentischii (Bleek): Blgr. l.c. p. 343. Sinkawang (Bleeker).
- Calamaria agamensis (Bleek): Blgr l.c. p. 343. Sinkawang (Bleeker).

- Calamaria leucocephala (D. and B.): l.c. p. 344.

 Kuching (Bishop Hose). Matang. S. M.

 Belly red, the colour extending on to the sides of the tail;
 anterior part of the body paler.
- Calamaria schlegelii (D. and B.): Blgr. l.c. p. 345. Borneo.
- Calamaria borneensis (Bleek): Blgr. l.c. p. 347. Sintang (Bleeker). Matang. Kuching (H. H. the Rajah). Simanggang. Baram (Hose). S. M.
- Calamaria benjaminsii (Edel.): Blgr. l.c. p. 347. Borneo.
- Calamaria melanota (Jan.): Blgr. l.c. p. 349. Tandjong. S. E. Borneo.
- Calamaria lovii (Blgr.): Blgr. l.c. p. 350. Rejang R. (Brooke Low). Niah (Hose). S. M.
- Calamaria gracillima (Günth.): Blgr. l.c. p. 350. Matang. Tegora. S. M.
- Calamaria picteti (Perraca): Perraca. Revue Suisse Zool, vii, p. 325, Pl. xiv (1899).
 Sarawak (Pictet and Bedot).

SERIES B. Opisthoglypha. Sub. Fam. iii. Homalopsinæ.

Genus Hypsirhina.

- Hypsirhina alternans (Reinw.): Blgr. Cat. Snake B. M. III, p. 4. Kuching. S. M.
- Hypsirhina plumbea (Boie): Blgr. l.c p. 5. Labuan (Dillwyn).
- Hypsirhina enhydris (Schneid.): Blgr. l.c. p. 6. Simanggang. Saribus. S. M.
- Hypsirhina punctata (Gray): Blgr. l.c. p. 12. Sinkawang (Bleeker). Kuching. S. M.

Hypsirhina doriæ (Peters): Blgr. l.c. p. 13. Sarawak (Everett). Kuching.

S. M.

Genus Homalopsis.

Homalopsis buccata (L): Blgr. l.c. p. 14.
Pontianak and Sebraoeng (Chaper). Labuan (Dillwyn).

Genus Cerberus.

Cerberns rhynchops (Schneid.): Blgr. l.c. p. 16. Sibu (Hon. C. A. Bampfylde). Kuching. Buntal. S. M.

Genus Fordonia.

Fordonia leucobalia (Schleg.): Blgr. l.c. p. 21. Niah (Everett), Kuching. Santubong (Lewis). S. M.

Genus Cantoria.

Cantoria violacea: (Gunth.) Blgr. l.c. p. 23. Borneo.

Sub. Fam iv. Dipsadomorphina.

Genus Dipsadomorphus.

Dipsadomorphus dendrophilus (Boie): Blgr. l.c. p. 70.
A widely distributed species.
S. M.

Dipsadomorpus nigriceps (Gunth.): Blgr. l.c. p. 72. Bongon, N. Borneo (Everett).

Dipsadomorphus jaspideus (D. & B.): Blgr. l.c. p. 73. Labuan (Dillwyn). Kuching. Saribas Baram (Hose). Pankalan ampat (Haviland). S. M.

Dipsadomorphus drapiezii (Boie): Blgr. l.c. p. 74. Kuching. Sandakan (Cator). Baram (Hose). Pankalan ampat (Haviland). S. M.

Dipsadomorphus cynodon (Boie): Blgr. l.c. p. 78.

Valley of Sebroeang (Chaper). Kuching, Rejang R.
(Brooke-Low). Sandakan (Cator). S. M.

Psammodynastes pulverulentus (Boie): l.c. p. 173.

Valley of Sebroeang (Chaper). Kina Balu (Whitehead).

Barabei, S.E. Borneo (Grabowsky)., Pankalan ampat (Haviland).

S. M.

Psammodynastes pictus (Gunth.): Blgr. l.c. p. 174.

Dulit (Hose). Labuan (Dillwyn). Telang, S. E. Borneo (Grabowsky). Rejang River (Hon. C. A. Bampfylde).

Kuching (Bartlett). S. M.

Genus Dryophis.

Dryophis prasinus (Boie): Blgr. l.c. p. 186.

A very variable species in colouration—green, brown, salmon coloured or speckled. Very widely distributed. S. M.

Dryophis fasciolatus (Fisch.): Blgr. l.c. p. 182. S.E. Borneo, (Grabowsky). Baram (Hose). Kuching, S. M.

Genus Dryophiops.

Dryophiops rubescens (Gray.): Blgr. l.c. p. 194. Sandakan (Cator). Sarawak (Doria and Beccari).

Genus Chrysopelea.

Chrysopeleo ornata (Shaw): Blgr. l.c. p. 196.
Dulit (Hose). Labuan (Dillwyn). Braang (Haviland). Kuching, Rejang R. (Hon. C. A. Bampfylde), Pontianak (Chaper). Oya. S. M.

Chrysopelea chrysochlora (Reinw.): Blgr. l.c. p. 198. Kuching (H. H. the Rajah).

S. M.

Series C. Proteroglypha.

Sub. Fam. v. Hydrophiina.

Genus Hydrus.

Hydrus platurus (L): Blgr. l.c. p. 267. Oya.

S. M.

Genus Hydrophis.

- Hydrophis gracilis (Shaw): Blgr. l.c. p. 280. Borneo.
- Hydrophis fasciatus (Schneid.): Blgr. l.c. p. 281. Off coast of N. Borneo (Whitehead).
- Hydrophis brookii (Gunth.): Blgr. l.c. p. 282, Sarawak River.

Hydrophis obscurus (Daud): Blgr. l.e. p. 284. Borneo.

Hydrophis floweri (Blgr.): P. Z. S. 1890, p. 106. N. Borneo, (Flower).

Genus Distira.

- Distira brugmansii (Boie): Blgr. Cat. Snake B.M. III, p. 292. Muka (Capt. H. W. Peck). S. M.
- Distira jerdonii (Gray): Blgr. l.c. p. 299. Borneo.
- Distira sarawacensis (Blgr.): Blgr. P. Z. S. 1900, p. 184, Pl. xiv, f. 2. Sarawak river: Type in Sarawak Museum. S. M.
- Distira (?) viperina (Schmidt): Blgr. Cat. Snakes B. M. III, p. 298.Oya (Cox). If correctly identified this is new to Borneo.

Genus Enhydris.

Enhydris hardwickii (Gray): Blgr. l.c. p. 301. Borneo (Sir E. Belcher). Santubong.

S. M.

S. M.

S. M.

Genus Enhydrina.

Enhydrina valakadien (Boie): Blgr. l.c. p. 302. Santubong. Sarawak River. Trusan River.

A specimen was captured at the mouth of the Sarawak river in February 1900, with several examples of a Cirripede allied to if not identical with *Dichelaspis pellucida* (Darwin) adhering to the scales.

S. M.

Sub. Fam. vi. Elapinae.

Genus Bungarus.

Bungarus fusciatus (Schneid.): Blgr. l.c. p. 366. Kuching: Baram (Hose).

S. M.

Bungarus flaviceps (Reinh.): Blgr. l.c. p. 371.

Kina Balu (Everett). Kuching. Sibu (H.H. the Rajah Muda). Simanggang.

S. M.

Genus Naia.

Naia tripudians (Merr): Blgr. l.c. p. 380.

Var Miolepis. Rejang river (Brooke-Low). Labuan (Dillwyn). Kina Balu (Everett). Kuching. Limbawang, lower Padas R. (Everett). Oya. S. M.

Var pancisquamis. Sarawak (Pictet and Bedot).

Naia bungarus (Schleg.): Blgr. l.c. p. 386.

Baram (C. Hose). Sibu (H. H. the Raja Muda). Pankalan

ampat (Haviland). Kuching.

The young is very variable in colouration, an example recently captured at Sibu by H. H. the Raja Muda was marked almost exactly like *Bungarus bungaroides* (Cantor) but with an additional white band behind the eyes.

Genus Doliophis

Doliophis bivirgatus (Boie): Blgr. I.c. p. 400.

Sibu. Busau. Sintang (Bleeker). Matang. Bongon (Everett) Pontianak (Chaper) Kuching. Pankalan ampat (Haviland).

Doliophis intestinalis (Laur.): Blgr. l.c. p. 401

Dulit (Hose). Labuan (Collingwood). Matang. Tandjong. S. E. Borneo, Sintang (Bleeker). Kina Balu (Everett). Kuching, Simanggang. S. M.

Fam. Amblycephalidae.

Genus Haplopeltura.

Haplopeltura boa (Boie): Blgr. l.c. p. 439.

Kuching. Baram (Hose). Saribas. Pankalan ampat (Haviland).

Genus Amblycephalus.

- Amblycephalus lævis (Boie): Blgr. l.c. p. 441 Kina Balu (Everett) Pankalan ampat (Haviland). Kuching (Bartlett). S. M.
- Amblycephalus malaccanus (Peters): Blgr. l.c. p. 442. Dulit (Hose). Bongon (Everett).
- Amblycephalus nuchalis (Blgr): Blgr. P. Z. S. 1900 p. 185 Pl. xvii. f. 1. S. M. Matang. Saribas. Type in Sarawak Museum.

Fam. Viperidæ. Sub. Fam. Crotalinæ. Genus Lachesis.

- Lachesis gramineus (Shaw): Blgr. Cat. Snakes. B. M. III, p. 554.

 Dulit (Hose). Kina Balu (Whitehead). Pankalan ampat (Haviland). S. M.
- Luchesis sumatranus (Raffl.): Blgr. l.c. p. 557. Dulit (Hose).
- Lachesis puniceus (Boie): Blgr. l.c. p. 560. Borneo (Sir H. Low).
- Luchesis borneensis (Peters): Blgr. I.c. p. 561.
 Dulit (Hose). Matang. Pankalan ampat (II. H. the Rajah).
 Paitan, N. Borneo (Everett) and Baram. S. M.
- Lachesis wayleri (Boie): Blgr. l.c. p. 562.
 Wideiy distributed throughout the island.
 S. M.